Injury Prevention and Control

Injuries take a significant toll on the health of Maine people, especially our youth. They are the leading cause of death in Maine for the population under the age of 34. Because injuries take a high toll among our youngest citizens, they account for approximately 30% of all years of productive life lost before age 65, exceeding losses from heart disease, cancer, and stroke combined.

Overall, injuries constitute the fifth leading cause of death in Maine, accounting for an average of over 600 deaths annually, and represent over 1 in 20 of all Maine deaths. Many more Maine residents suffer permanent or temporary disability from injuries. Of all deaths from injuries, about two thirds are from unintentional injuries (motor vehicle crashes, fires, falls) and the remaining one third result from intentional injuries (suicide, homicide).

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Healthy Maine 2000 Goal

Reduce the rate of injuries to Maine citizens

Overview

Unintentional Injury

Unintentional injuries are the leading cause of death for Maine residents ages 1-34 years old. Those injuries commonly considered to be unintentional constitute about two-thirds of all injury deaths, and are almost equally divided between transportation (motor vehicle) injuries and other unintentional injuries. The "other" category is often labeled home and leisure to reflect the circumstances surrounding most of the injury occurrences, but some also occur in occupational settings or schools.[1]

Even though the mortality rate of unintentional injuries in Maine falls below the national rate, the toll taken by unintentional injuries poses a significant public health issue. For instance, motor vehicle crashes and fires were the leading causes of unintentional injury deaths between 1987-1996 for Maine children age 1 to 5 years old.

Unintentional injuries are the leading cause of death for Maine residents ages 1-34 years old.

Progress has been made in several areas during the last decade. As a result of increased seatbelt usage, there has been a corresponding decrease in fatal crashes. More people are restraining their children when they are in a vehicle; however, the misuse rate (i.e., improper installation of restraint equipment) for child restraints hovers between 85-90%.[2]

For Maine children 1 to 5 years old, motor vehicle crashes and fires were the leading causes of unintentional injury deaths between 1987-1996.

Over the past twenty years, there was a dramatic increase in the number of smoke alarms installed in homes. However, a false sense of security has emerged as recent studies show that smoke alarms are either disarmed or not functioning in a significant number of Maine homes. Furthermore, approximately 7% of the Maine population have no smoke alarms in their homes.[3]

Bicycling continues to be a popular sport in Maine. As with the use of safety restraints in vehicles, it has been proven that the use of bike helmets will reduce the severity of head injuries resulting from bike crashes. Maine legislation enacted in 1999, requiring bike helmets for riders under the age of 16, should help to address this preventable cause of injury.

Intentional Injury

Considering all causes of death for people in all age groups, suicide is the tenth leading cause of death in Maine.[4] The Maine suicide rate among all age groups is typically higher than the national average rate. The rate of firearm suicides in Maine is a significant contributing factor in the elevated rate of suicide. Six of ten suicides among persons of all ages, and seven of ten youth suicides were committed with a firearm. There are an average of 165 suicides annually

For every youth suicide, there are an estimated 20-25 suicide attempts.

and an estimated 3,000 to 4,000 suicide attempts. The cost of health care and lost wages for suicide attempts for one year (1996) in Maine is estimated to be $115,219,897.[5]

The highest suicide rates in Maine, as in the U.S., are among the elderly. The highest number of deaths from suicide, without accounting for population size, occur among middle-aged people. Youth suicide is particularly tragic, also occurring in Maine at rates higher than the national average. Among 15 to 24 year olds, suicide is the second leading cause of all deaths, accounting for about 25 to 30 suicides in Maine each year. For every youth suicide, there are an estimated 20-25 suicide attempts. While more young women attempt suicide, more young men actually complete suicide.[6]

The suffering and devastation created by the loss of a loved one to suicide is immeasurable. The impact of suicide on friends, family, and an entire community is devastating and long lasting. There is no typical profile of a suicidal person. Suicide is usually the result of a complex set of behaviors and circumstances. The good news is that, using a combination of strategies, many suicides can be prevented.

In the late 1980s, the Surgeon General of the United States identified domestic violence as the most serious public health risk facing women. Domestic violence remains a leading cause of injuries to women from ages 14 to 44.

The highest suicide rates in Maine, as in the U.S., are among the elderly.

Maine law describes domestic violence as a serious crime against the individual and society, producing an unhealthy and dangerous family environment, resulting in a pattern of escalating abuse, including violence that frequently culminates in intra-family homicide.[7]

Police data indicate a serious domestic violence problem in Maine. A high percentage of homicides in the state are domestic violence-related murders. For six of the nine years of data from 1990-1997, more than 50% of all murders were related to domestic violence among Maine residents.

Another intentional injury of concern is Shaken Baby Syndrome. In a study of children aged two and under admitted to Maine hospitals from 1991 - 1994 with serious head injuries, 19 were diagnosed with Shaken Baby Syndrome. Three of these children, aged six weeks to 19 months, died.

A high percentage of homicides in the state are domestic violence related murders.

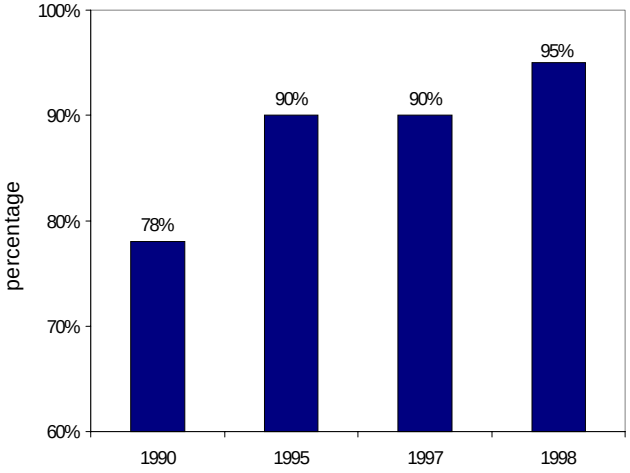
New and Emerging Issues and Challenges

Use of Safety Equipment in Motor Vehicles

Although the percent of children riding restrained has increased over the decade, the incorrect use of restraints remains a problem. It is estimated that nearly 100% of Maine children ages 4 and under are not properly restrained in motor vehicles-either they are not in a car seat or the car seat has not been properly installed. The Bureau of Health's Maine Injury Prevention Program (MIPP) continues to support a statewide network of Child Passenger Safety Seat Loan Programs, assuring easier access to car seats for Maine's families. In 1999, the MIPP began providing comprehensive training programs to certify

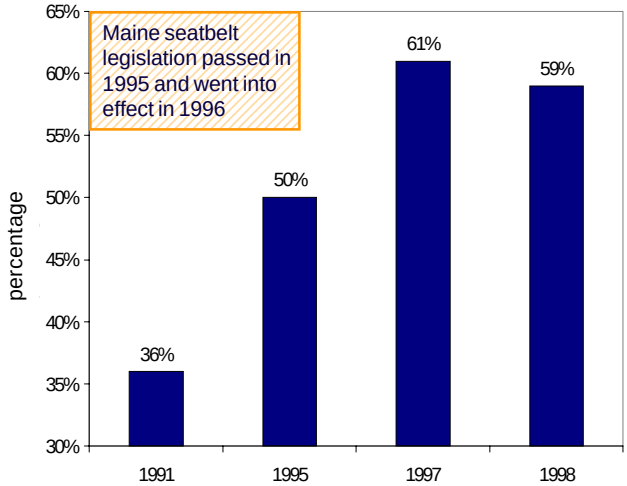
Nearly 100% of Maine children under 5 are not properly restrained in Motor Vehicles

Maine's Percent Usage of Child Car Safety Seats for Children Aged 4 and Under 1990-1998



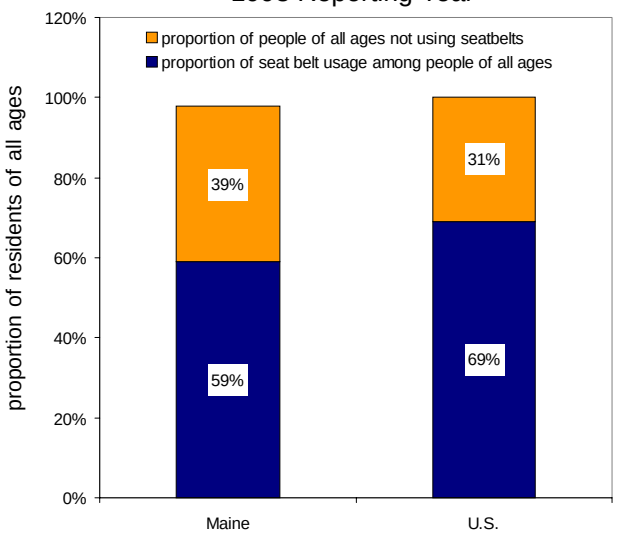
Source: Maine Department of Human Services, Bureau of Health, Maine Injury Prevention Program, Program Data

Maine's Seat Belt Usage for All Ages Selected Years 1991-1998



Source: Maine Department of Human Services, Bureau of Health, Behavior Risk Factor Surveillance System, 1991-1998

Maine's Overall Seat Belt Usage as Compared to the National Average 1998 Reporting Year



Source: Maine Department of Human Services, Bureau of Health, Behavior Risk Factor Surveillance System; Centers for Disease Control and Prevention, Behavior Risk Factor Surveillance System

technicians in child passenger safety. By doing so, it is hoped that all Maine children will have easy access to car seat checks, assuring that more of our children are transported safely.

Finding ways to work with Maine's citizens to increase seat belt usage remains one of our major challenges. In 1991 36% of people of all ages in Maine used seatbelts. Usage continued to increase during the first part of the decade with 50% of all Maine people using seatbelts by 1995. In 1996, Maine's first mandatory seat belt law for adults went into effect. The law is a "secondary" law, which means that law enforcement officers must suspect the operator of another traffic violation before a ticket can be written for the seat belt violation. Up until that time, Maine's seat belt usage rate for adults was way below the national average. As of 1998, Maine's overall seatbelt usage rate increased closer to the national average, with Maine's rate at 59% compared to the national average of 69%.

Bicycle Injuries

In 1999 the Maine Legislature enacted a bill requiring anyone under age 16 who is operating a bicycle or riding in a bicycle seat or trailer to wear a properly fitting bicycle helmet. Following enactment, a number of organizations including the MIPP, were able to provide bike helmets to Maine residents, which were fitted and distributed by law enforcement agencies, fire departments and schools along with information and education on the proper use of helmets.

Fire-Related Deaths

Over the past decade, fire-related death rates have not changed significantly. An average of 17 Maine people die in fires every year, many of them young children. In fact, for Maine children ages 1 to 5 years old, fires are the second leading cause of death. One of our biggest challenges in preventing these deaths and injuries is to assure that all Maine homes have functioning and properly installed smoke alarms.

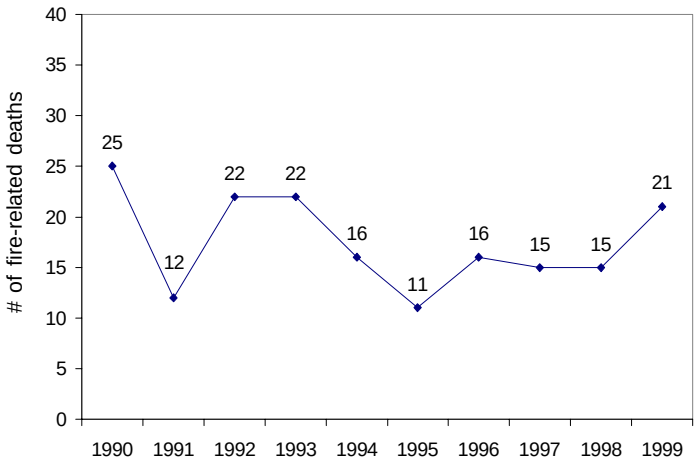
Falls

As our population ages, we face increasing challenges in addressing one of the leading causes of preventable hospitalizations among older adults - falls. There are two issues that if addressed can have a substantial impact on this problem. First, many elders decrease their activity level in response to a fear of falling. This decreased activity level in turn can increase their risks for falls. Therefore, assuring appropriate activity levels for our elders can help reduce falls. Second, there are a number of simple home-based strategies such as adjusting furniture alignment in a way in which the risk for falls is minimized. Assuring that Maine's older adults have access to this information can also help address this growing public health concern.

Youth Violence Prevention/Conflict Management

While Maine youth do not experience the same level of violence as their counterparts in more urban areas of the country, violence is an issue of concern among our adolescents and young adults. In the 1997 Youth Risk Behavior Survey of 1,837 Maine high school students, 40% of male and 24% of female students reported being in a physical fight within the past 12 months. 22% of students reported carrying a weapon and 7% reported carrying a gun at least once during the previous month. 9% of male and 5% of female students reported being threatened or injured with a weapon on school property one or more times during the past 12 months.[9]

Maine's Unintentional Fire-Related Deaths
Number of Deaths per Year
1990-1999



Source: 1990-1998 data were obtained from the Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics. 1999 data is from the Maine Fire Marshall's Office

Maine's Juvenile Arrests for Violent Crimes
(murder, rape, robbery and aggravated assault)
1990-1998

Crime Type	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Murder	1	0	2	0	1	0	1	3	0	1	9
Rape	10	13	23	22	18	16	18	20	15	13	168
Robbery	27	25	31	17	50	81	88	62	35	41	457
Aggravated Assault	85	99	97	107	144	119	130	104	117	103	1105
Total	123	137	153	146	213	216	237	189	167	158	1748

Source: Uniform Crime Report (UCR), Maine 1990-1997, Department of Public Safety, Maine State Police Reports

Many of the perpetrators of civil rights violations and bias incidents have been young men of school age.

While juvenile crime in Maine ranks low when compared to the national average, it is important to note that there were an average of 174 juvenile arrests for violent crime per year from 1990-1999. The number of juvenile arrests for violent crimes (murder, rape, robbery and aggravated assault) increased from a low of 123 in 1990 to a high of 237 in 1996. In 1997, 1998 and 1999 there were declines in the annual totals of juvenile arrests, but these declines did not reach the low rate experienced during 1990.

A number of state and local efforts have recently been initiated to address youth violence. These stategies include placing resource oficers in school settings, initiating school-based civil rights teams, implementing peer mediation programs, training conflict resolution educators for schools and communities, implementing mentoring programs, creating structured acitivities for after school hours, and providing opportunities for youth to serve their communities.

As Maine moves beyond the year 2000, increased coordination among program stakeholders, and attention to the continuation, implementation, and evaluation of these initiatives will be necessary to effectively address the prevention of youth violence.

Easy access to firearms has been a key factor in the increase of serious injury and death among Maine youth.

In order for prevention efforts to be well-guided, we need to continue information gathering on juvenile crime. For instance, there is indication that among incarcerated juveniles there are higher rates of mental health issues, sexual abuse (especially for girls), substance abuse, poverty, poor physical health, disassociation from schools, disrupted communities, and ineffectual families.[10]

Data from the Maine Attorney General's Office reveals that the incidence of civil rights violations and/or bias incidents motivated by religious, ethnic, racial or sexually-oriented prejudice remains a significant issue in Maine. Many of the perpetrators of civil rights violations and bias incidents have been young men of school age.

Seven of ten Maine youth suicides are committed with a firearm.

Between October 1992 and December 1999, 1,363 complaints of civil rights violations were filed with the Attorney General's Office and 119 formal actions were taken. The victims of these violations were 34% African American, 33% Gay or Lesbian, 7% Jewish, and 26% others.

Youth Suicide

Easy access to firearms has been a key factor in the increase of serious injury and death among Maine youth. Over the last ten years, the largest increase in child firearm deaths was due to suicide. There are more suicides than homicides by firearms in Maine. Seven of ten youth suicides are committed with a firearm. Vulnerable young people with access to a firearm are at increased risk of suicide. In a state where firearm ownership is high, messages communicated about firearm safety must be carefully crafted.

Maine has been actively addressing youth suicide prevention since Governor King appointed a task force in the fall of 1995. Under direction from the Governor's Children's Cabinet, an interdepartmental team led by Bureau of Health staff developed a comprehensive plan to prevent youth suicide. The Maine Youth Suicide Prevention Program has begun to implement changes at the state level to improve access to appropriate prevention and intervention services.

Future Direction

Significant progress has been made in the injury prevention field over the past decade. With increased knowledge of injury prevention has come an increase in injury prevention activities, accompanied by a substantial reduction in the occurrence of many injuries. The most notable reduction in injury deaths has been in motor vehicle injuries, although strides have also been made in reducing occupational injuries. By contrast, the rates of suicide and domestic violence in Maine remain relatively unchanged. Injuries and injury-related deaths, both intentional and unintentional, account for millions of dollars in health care costs, pain and suffering, and diminished quality of life every year in Maine. The perception that injuries are "accidents" and cannot be prevented is still prevalent among the general population. New opportunities for coordination and collaboration to deliver injury prevention initiatives must be found to increase understanding of injury prevention among the public.

Several key injury areas warranting further attention include:

- Although the main focus of statewide injury prevention efforts has been infants, children and young adults, injuries to other populations, especially the elderly, demands focused prevention efforts.

- The magnitude of fire and fall injuries among the elderly must be addressed.

New opportunities for coordination and collaboration to deliver injury prevention initiatives must be found to increase understanding of injury prevention among the public.

- Creating awareness of the prevalence of domestic violence and changing the public perception of domestic violence must be approached by all professional disciplines.

- Suicide is the leading cause of injury death among persons 25 - 64 years of age. Suicide prevention among individuals over age 24 also represents a pressing problem for planning future efforts.

- Improved data systems should also be geared toward improving our ability to identify populations facing disparities.

- Evaluation of current efforts needs to guide improvements in future efforts.

- Increased technical assistance is needed to assure that current, effective injury prevention strategies are extended throughout Maine.

- Establishing a comprehesive injury data surveillance system is necessary to improve decision-making with regard to prevention policies and initiatives. The work begun by the Maine Injury Surveillance Team should provide this.

Healthy Maine 2000 Objectives

Objectives established to reduce the rate of injury to Maine's citizens

Health Status Objective

Reduce unintentional injury mortality by 25 percent to 22 deaths per 100,000 by year 2000.

Maine 1990 Baseline: 29.2 percent
Most Recent Data: 1998, 26.4 percent

Maine has yet to reach this objective's goal of 22 deaths per 100,000 for the year 2000. Although significant strides have been made during the decade, the most recent data shows the rate is still 16.7% higher than the year 2000 goal.

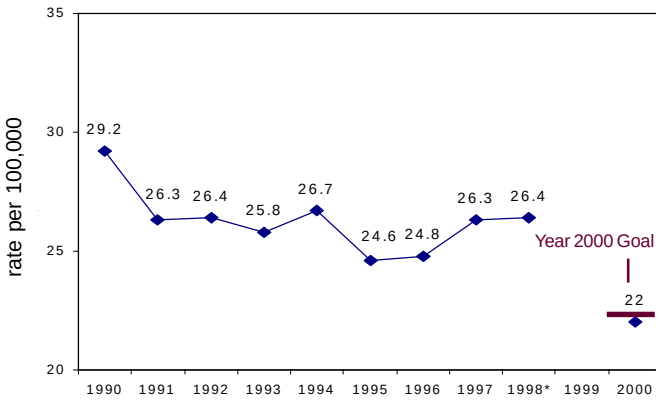
Unintentional injuries account for 2/3 of all injury deaths, and are almost equally divided between motor vehicle injuries and all others. During the 1990's, policies and programs were implemented to increase the use of seat belts and child safety seats.

Fires continue to be a major cause of death and injury in Maine at the end of the decade. For calendar years 1992 through 1998, there were 135 fire fatalities in Maine. The high rate of injury and death as a result of fire/burn among the very young and elderly are of particular concern in our large rural state.

In 1997, the Bureau of Health received a three year grant award from CDC to implement a statewide fire safety and burn prevention program, concerning the prevalence of residential smoke alarms and targeting at-risk households. More than 5,000 smoke alarms have been provided to Maine residents during this period.

The Bureau of Health currently funds five Safe Community Grants to conduct injury prevention activities within their respective communities. Each of these has chosen to address injury prevention issues important within their communities. These include child passenger safety, home safety, firearm safety, recreational safety, and pedestrian safety among other activities. By providing injury prevention funding to communities, the capacity to address significant local injury issues is greatly enhanced.

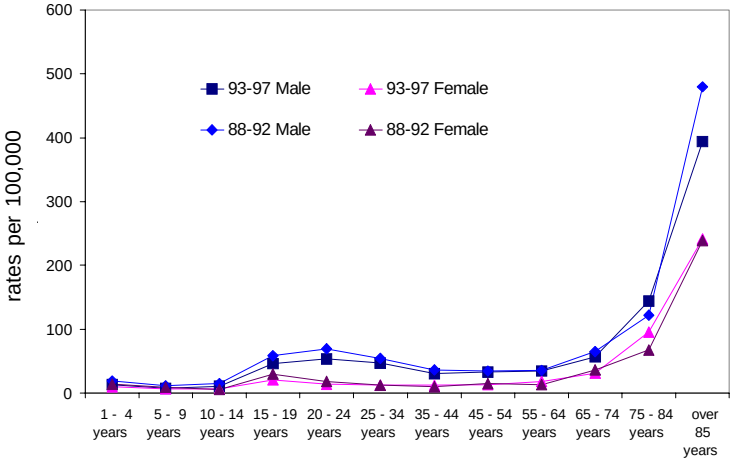
Maine's Unintentional Injury Mortality Rate
Age-Adjusted Per 100,000
1990-1998



* Indicates preliminary data

Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics

Maine Unintentional Injury Death Rates
Five Year Averages
1988-1997



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics

Healthy Maine 2000 Objectives

Objectives established to reduce the rate of injury to Maine's citizens

Surveillance Objective

Establish and maintain an ongoing surveillance system to monitor statewide injury mortality and morbidity.

Conducting surveillance is critical in addressing injuries as a public health problem. The Bureau of Health's Maine Injury Prevention Program (MIPP) has worked to establish and maintain an ongoing, statewide surveillance system to monitor injury morbidity and mortality data. Ongoing monitoring of child, teen, and young adult injury morbidity and mortality has been conducted throughout the decade. Although Maine has pieces of an injury surveillance system, and MIPP staff and other stakeholders routinely utilize these data, there is still no comprehensive surveillance system in place in the year 2000.

The MIPP has collaborated with state, local and national data sources to collect and analyze selected data. A team of individuals representing various Maine data sources have begun working together to create a multi-agency injury surveillance system. Team members include the MIPP, Office of the Chief Medical Examiner, Maine Emergency Medical Services, Office of Data Research and Vital Statistics, Maine Trauma Advisory Committee, Maine Health Data Organization, and the Maine Department of Transportation.

Collection of accurate injury morbidity data has been an issue throughout the decade. Improvement of nonfatal injury data sources has been a focus of MIPP, working with the Maine Hospital Association, and the Maine Health Information Management Association.

External causes of injury are classified by E codes, which enable health care providers to determine the specific cause and intent of an injury. Without E codes, it is impossible to know if an injury resulted from a car crash, a fall, or a gunshot wound. Accurate reporting of E codes substantially improved in the last several years of the decade. This rich data source has proven invaluable in monitoring the incidence of injury and planning prevention activities.

In the second half of the decade, the increase in E code reporting was, in part, a result of the collaboration and sponsored training efforts of MIPP, Maine Hospital Association, Maine Health Data Organization, Maine Office of Data Research and Vital Statistics, Maine Health Information Center, Maine Trauma Advisory Committee, Children's Safety Network, and the Maine Health Information Management Association. These sponsored training sessions focused on the importance, uses, and proper identification of E codes. To continue this positive trend in reporting rates, further training and technical assistance opportunities are being planned.

Ongoing monitoring of child, teen, and young adult injury morbidity and mortality has been conducted throughout the decade.

Healthy Maine 2000 Objectives

Objectives established to reduce the rate of injury to Maine's citizens

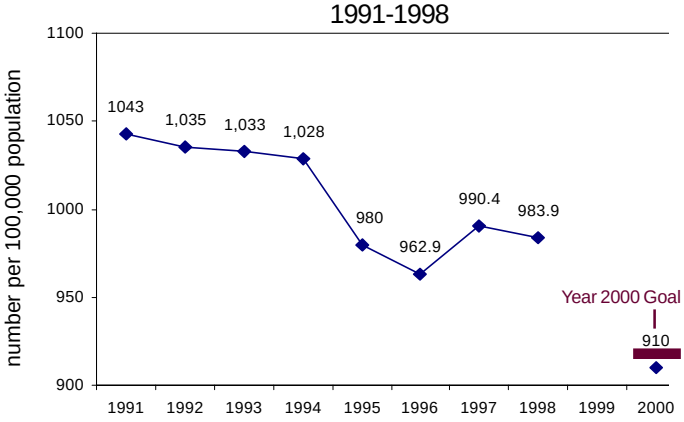
Health Status Objective

Reduce nonfatal injury hospitalizations by 15 percent, to no more than 910 per 100,000.

Maine 1991 Baseline: 1,043 per 100,000
Most Recent Data 1998: 983.9 per 100,000

Although the goal of 910 nonfatal injury hospitalizations per 100,000 has not been achieved, significant progress has been made during the decade. The leading cause of injury hospitalization varies by age group. It is important to note that information on the cause of an injury was lacking in many medical records from 1990 to 1996, when less than 50% of medical records included E codes. As of 1998, 95% of hospital discharge data were reporting E-coded medical records. Despite this improvement, the chart to the right underestimates the number of injury hospitalizations.

Maine's Nonfatal Injuries
Number of Hospitalizations Per 100,000
1991-1998



Source: Maine Hospital Discharge Data Set; Maine Health Data Organization

Nonfatal Unintentional Injury Hospitalizations

Falls among the elderly continue to be the leading cause of injury hospitalization. Although the main focus of the statewide prevention efforts is on children and young adults, the magnitude of the problem confronting older adults warrants attention.

Motor vehicle crashes were responsible for over 5,000 hospitalizations during the past decade. In early 1996, Maine passed a seat belt law requiring all people 4 years and older to use safety belts, and those under 4 to ride in a federally-approved child safety seat. The law is a "secondary" law. That means the officer must suspect another violation before the officer can cite the driver for a seat belt violation.

Unintentional poisonings were the third leading cause of hospitalizations from 1993-1997. Due to an increase in state funding, the Maine Poison Center has recently increased its outreach efforts to prevent poisonings.

Fire burns continue to be one of the leading causes of unintentional injury hospitalizations in Maine. It is estimated that approximately 7% of Maine homes still do not have smoke alarms.[11]

Firearm injuries were one of the leading causes of unintentional injury hospitalizations between 1993-1997. Firearm safety has been identified as a priority for the Bureau of Health's Maine Injury Prevention Program. Trainings on firearm safety for adults and a video oriented to youth are being implemented.

Maine's Leading Causes of Nonfatal Unintentional Injury Hospitalizations by Age
1993 - 1998

Age:	0 - 14	15 - 24	25 - 44	45 - 64	65+	Total
Method of Injury						
Falls	1,068	663	2,246	3,411	15,982	**23,370**
Motor Vehicle	482	1,667	2,131	1,141	1,095	**6,516**
Other Transport	283	108	186	120	43	**740**
Poisoning	385	207	521	345	500	**1,958**
Natural/Environmental	122	45	202	170	203	**742**
Fire/Flames	24	33	88	38	37	**220**
Drowning/Submersion	9	2	6	5	2	**24**
Suffocation	30	7	6	11	40	**94**
Firearms	8	30	39	18	4	**99**
Other & Late Effects	*736*	*1,050*	*2,166*	*1,404*	*1,363*	***6,719***
Adverse Event/Effects	*939*	*990*	*4,174*	*8,052*	*20,312*	***34,467***
Records with Any Mention of Unintentional Injury	*4,045*	*4,736*	*11,551*	*14,496*	*38,462*	***73,290***

Source: Maine Hospital Discharge Data Set; Maine Health Data Organization

NOTE: Recently Maine hospitals have improved their E-Coding of injury hospitalizations. According to Maine Health Data Organization, in 1993, 56.7% of records with a principal diagnosis of injury had an E-code assigned to the record. In 1998, hospital E-coding had improved to 87.2%. This means that the numbers above are an under-representation of the numbers of injury hospitalizations.

Healthy Maine 2000 Objectives

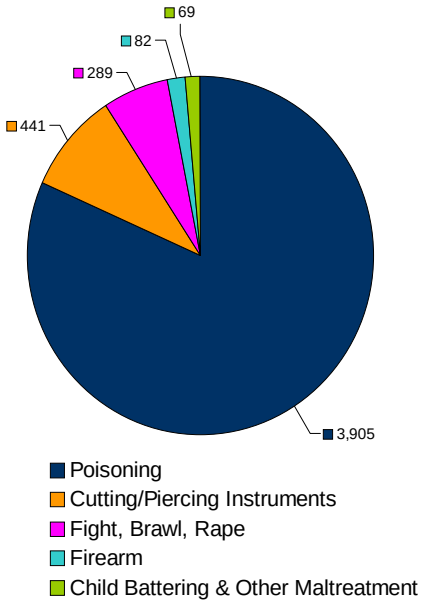
Objectives established to reduce the rate of injury to Maine's citizens

Nonfatal Intentional Injury Hospitalizations

From 1993 through 1998, self-inflicted injury was the second leading cause of injury-related hospitalization among persons aged 10 to 24. Among individuals aged 25 to 64 years of age, self-inflicted injury ranked third and among older persons aged 65 and over it ranked fifth as a leading cause on injury hospitalization. However, injury intent is not always accurately documented.

Poisoning was the leading cause of intentional injury hospitalizations for all age groups in the five years from 1993-1998. Other leading reasons for intentional injury hospitalizations include cutting, fights, and rape. For children under 14, the second leading cause of intentional injury hospitalization was child abuse. While firearm injuries are one of the leading causes of intentional injury hospitalization for persons over 15 years of age, due to the lethality of firearms, many firearm injuries will result in debilitating injury or death.

Maine's Leading Causes of Nonfatal Intentional Injury Hospitalizations, Combined Self-Inflicted and Assault Injury 1993 - 1998



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization

Maine's Leading Causes of Nonfatal Intentional Injury Hospitalizations by Age, Combined Self-Inflicted and Assault Injury 1993 - 1998

Method of Injury	Age:	0 - 14	15 - 24	25 - 44	45 - 64	65+
Poisoning		143	994	2,041	600	127
Cutting/Piercing Instruments		13	129	231	49	19
Fight, Brawl, Rape		4	82	164	26	13
Firearm		0	21	46	12	3
Child Battering & Other Maltreatment		50	5	7	3	4
Fire, Hot Object/Substance		0	6	33	5	0
Suffocation/Hanging/Strangulation		5	6	16	4	4
Jumping/Falling		1	3	13	4	0
MV Traffic Accident		1	1	7	3	0
Drowning/Submersion		0	1	2	1	1
Natural/Environmental		0	0	3	0	1
Transport, Other		0	0	0	0	0
Corrosive/Caustic Substance		0	0	0	0	0
Explosive		0	0	0	0	0
Other Specified, Classified (Self-Inflicted)		0	3	4	3	0
Other Specified, Not Classified (Self-Inflicted)		9	19	44	11	8
Unspecified Means (Self-Inflicted)		1	3	11	1	0
Other & Unspecified Means (by Others)		13	51	97	21	20
Late Effects of Assault		0	5	10	4	1

Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization

For children under 14, the second leading cause of intentional injury hospitalizations was child abuse.

Healthy Maine 2000 Objectives

Objectives established to reduce the rate of injury to Maine's citizens

Health Status Objective

Reduce by 10% the death rate from intentional injuries (homicide, suicide) for 15-24 year olds to no more than 16 deaths per 100,000 individuals

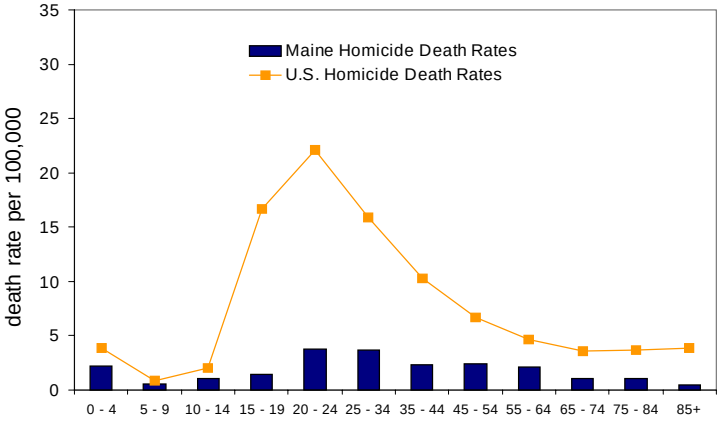
Although the original Healthy Maine 2000 objective combined youth suicide and homicide injuries within one objective, it is recommended that these types of injury deaths be viewed separately. From 1992-1996, suicide was the second leading cause of injury death for young people aged 10 to 24. For fourteen of the eighteen years between 1979 and 1996, the Maine youth suicide rate was above the national average. Although the rate of youth homicide in Maine is consistently below national averages, both the youth and the total suicide rates for the state generally rank from 16th to 18th nationally.

Suicide rates for five-year periods are used for comparing changes or trends over time. Comparing rates from year to year can be misleading because of the potential for large rate changes as the result of only a few more (or less) deaths.

Suicide rates among youth appear higher in the first half of the decade when compared to latter years. The reverse is true among older adults who experienced somewhat elevated suicide rates at the end of the decade.

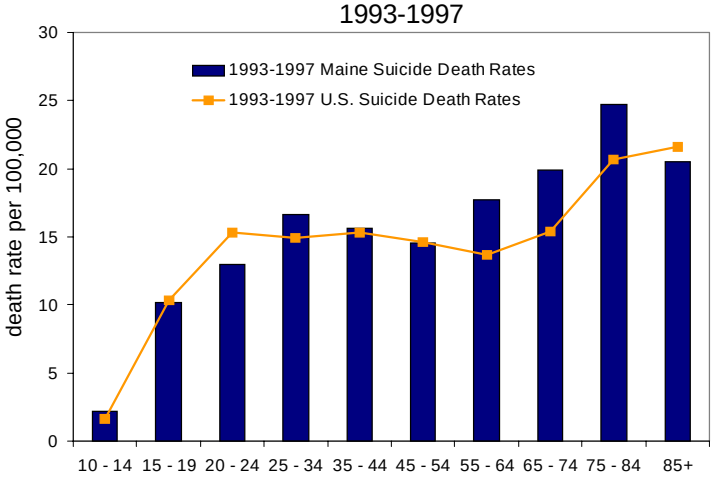
Maine Youth Suicide Prevention Program activities have focused upon improving state and community agency infrastructure to improve delivery of prevention and intervention services to Maine families and youths. The program has established a statewide crisis hotline, a statewide information center for provision of data and resource materials, professional training and public awareness education.

Maine and U.S. Homicide
Death Rates by Age Group per 100,000
10 year Average
1988-1997



Source of Data: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics

Maine and United States Suicide Death Rates
Five Year Averages Reported by Age Group
Death rate per 100,000
1993-1997



*indicates preliminary data

Source of Data: Centers for Disease Control and Prevention, National Center for Health Statistics; Maine Department of Human Services, Bureau of Health, Office of Research and Vital Statistics

Note: U.S. Data for 1998 is not yet available. Therefore most recent data is reported for both Maine and the U.S. up to 1997.

Healthy Maine 2000 Objectives

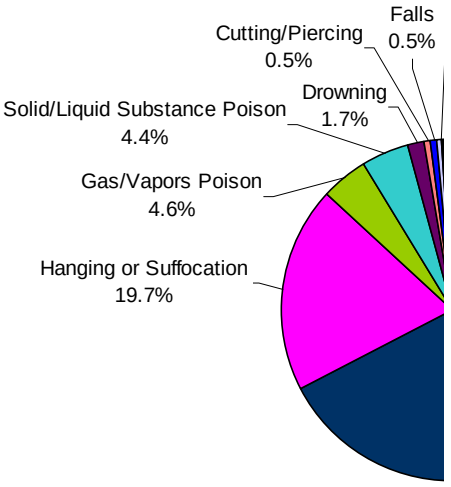
Objectives established to reduce the rate of injury to Maine's citizens

More than 2/3 of youth suicide deaths (277) are due to firearm injuries. Seven of ten Maine youth suicides are committed with a firearm. Suicide by hanging or suffocation is the second leading cause of youth suicide.

In the American Association of Suicidology's Consensus Statement on Youth Suicide by Firearms, it is noted that for fifty years, youth suicide rates have increased with a direct correlation to the use of firearms.

The Maine Youth Suicide Prevention Program conducted firearm safety training in 1998 and will produce an educational videotape in the year 2000.

1984 - 1998* Maine Suicide Deaths
Age 10-24, by Percent of Method Used
Maine Resident Data
N=412



Source of Data: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics

Health Status Objective

Reduce by 15 percent, injury rates caused by domestic violence.

Maine 1990 Baseline:
2,748 male on female assaults/arrests
231 parent on child assaults/arrests.

Most Recent Data 1998:
2,337 male on female assaults/arrests
230 parent on child assaults/arrests.

Domestic Violence

Domestic violence includes a wide range of behaviors where one individual controls another through verbal, physical, sexual, emotional, or psychological maltreatment.

Police data illustrate a significant domestic violence problem in Maine. The state of Maine has experienced a high percentage of domestic violence related murders. For six of the nine years of data from 1990, more than 50% of all murders were related to domestic violence among Maine residents.
Creating awareness of the prevalence of domestic violence statewide and changing attitudes about domestic violence continue to be major challenges for Maine. We need to continue to work on developing a coordinated community response to end domestic violence across the state.

Maine's Domestic Violence Assaults with Physical Injuries Fiscal Years 1990-1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Assaults	3,697	3,762	4,392	4,417	4,106	4,412	5,766	4,222	3,853
Male Assaults on Females*	2,748	n/a	n/a	n/a	2,888	2,976	2,550	2,690	2,337
Parent assaults on child	231	n/a	n/a	n/a	278	290	266	298	230
Child Assaults on parent	n/a	n/a	n/a	n/a	229	268	251	269	213
All other familial assaults**	n/a	n/a	n/a	n/a	721	878	847	965	1073

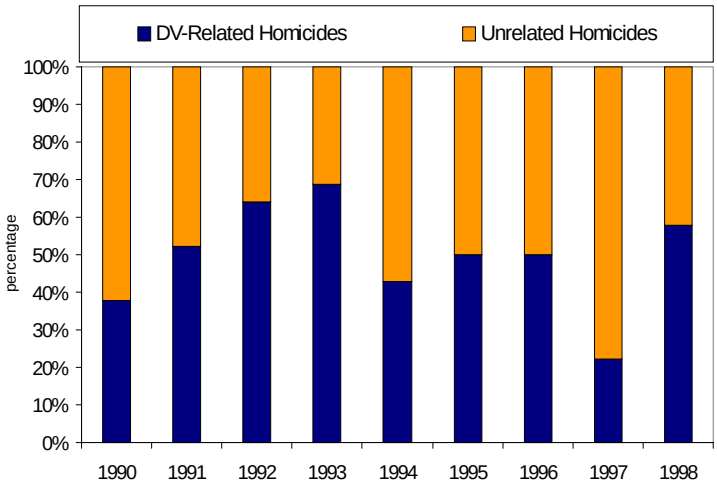
Source: Maine Department of Public Safety

Healthy Maine 2000 Objectives

Objectives established to reduce the rate of injury to Maine's citizens

In a study of children age two and under admitted to Maine hospitals from 1991 to 1994 with serious head injuries, 19 were diagnosed with Shaken Baby Syndrome. Three of these children, ages six weeks to 19 months, died. Of the 15 identified perpetrators, 13 were male. Multiple risk factors were identified including problems with substance abuse, interpersonal violence, experiencing abuse as a child and unrealistic expectations of the infant or child. Continued education by MIPP and others is necessary to address this important cause of child death and disability.

Maine's Domestic Violence Related Homicides
As a Proportion of All Homicides
1990-1998



Source:Uniform Crime Report (UCR), Maine 1990-1997, Department of Public Safety, Maine State Police Reports

Creating awareness of the prevalence of domestic violence statewide and changing attitudes about domestic violence continue to be major challenges for Maine.

Maine Reported Domestic Violence Filings
Fiscal Year 1990-1997

Type	1990	1991	1992	1993	1994	1995	1996	1997
Protection from Abuse**	3,978	4,891	5,319	5,405	5,718	5,888	5,766	6,120
Child Protective Custody*	506	554	647	665	628	792	834	942
Total**	**4,484**	**5,445**	**5,966**	**6,070**	**6,346**	**6,680**	**6,600**	**7,062**

*These are child abuse cases primarily filed by the Maine Department of Human Services.

**These totals do not reflect protection from harassment filings, which include both familial and non-familial filings.

References

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2. Edmund S. Muskie School of Public Service, Observational Survey.

3. Maine Department of Human Services, Bureau of Health, Fire Injury Reduction Effort (F.I.R.E.) Project Survey Data.

4. Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics.

5. Pacific Institute for Research and Evaluation (PIRE) 1999.

6. Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics.

7. Maine Domestic Violence Statute, Maine Revised Statues Annotated, Title 19, 762.

8. Uniform Crime Report (UCR), Maine 1990-1997, Department of Public Safety, Maine State Police Reports.

9. Maine Youth Risk Behavior Survey, 1997, Maine Department of Education, 1998.

10. Southern Maine Juvenile Facility, Mental Health Assessment, Surveys (Informal and Snapshot), July 1999.

11. Maine Department of Human Services, Bureau of Health, Behavior Risk Factor Surveillance System.